

of differing kinds which I may, perhaps, elsewhere endeavour more accurately to examine, and to shew of how great benefit the use of a *Microscope* may be for the discovery of Nature's course in the operations perform'd in Animal bodies, by which we have the opportunity of observing her through these delicate and pellucid teguments of the bodies of Insects acting according to her usual course and way, undisturbed, whereas, when we endeavour to pry into her secrets by breaking open the doors upon her, and dissecting and mangling creatures whil'st there is life yet within them, we find her indeed at work, but put into such disorder by the violence offer'd, as it may easily be imagin'd, how differing a thing we should find, if we could, as we can with a *Microscope*, in these smaller creatures, quietly peep in at the windows, without frightening her out of her usual byas.

The form of the whole creature, as it appear'd in the *Microscope*, may, without troubling you with more descriptions, be plainly enough perceiv'd by the *Scheme*, the hinder part or belly consisting of eight several jointed parts, namely, A B C D E F G H, of the first *Figure*, from the midst of each of which, on either side, issued out three or four small bristles or hairs, I, I, I, I, the tail was divided into two parts of very differing make; one of them, namely, K, having many tufts of hair or bristles, which seem'd to serve both for the fins and tail, for the Oars and Ruder of this little creature, wherewith it was able, by frisking and bending its body nimbly to and fro, to move himself any whither, and to skulk and steer himself as he pleas'd; the other part, L, seem'd to be, as 'twere, the ninth division of his belly, and had many single bristles on either side. From the end V, of which, through the whole belly, there was a kind of Gut of a darker colour, M M M, wherein, by certain *Peristaltick* motions there was a kind of black substance mov'd upwards and downwards through it from the orbicular part of it, N, (which seem'd the *Ventricle*, or stomach) to the tail V, and so back again, which *peristaltick* motion I have observ'd also in a Louse, a Gnat, and several other kinds of transparent body'd Flies. The *Thorax* or chest of this creature O O O O, was thick and short, and pretty transparent, for through it I could see the white heart (which is the colour also of the blood in these, and most other Insects) to beat, and several other kind of motions. It was bestuck and adorn'd up and down with several tufts of bristles, such as are pointed out by P, P, P, P, the head Q was likewise bestuck with several of those tufts, S S S; it was broad and short, had two black eyes, T T, which I could not perceive at all pearl'd, as they afterwards appear'd, and two small horns, R R, such as I formerly describ'd.

Both its motion and rest is very strange, and pleasant, and differing from those of most other creatures I have observ'd; for, where it ceases from moving its body, the tail of it seeming much lighter then the rest of its body, and a little lighter then the water it swims in, presently boys it up to the top of the water, where it hangs suspended with the head always downward; and like our *Antipodes*, if they do by a frisk get below that superficies, they presently ascend again unto it, if they cease moving,